

REMARKS

Objections to Specification

The specification was objected to under 37 CFR 1.71 as being unclear with respect to the following aspects:

- how the sheet is diverted from the processing apparatus;
- the main direction or line of travel of the sheet of material;
- the purpose of breaking or cutting in sections the sheet by nip rolls; and
- the purpose of having two cutting devices doing the same cutting operation.

Applicants respectfully traverse these objections and submit that the specification fully meets the requirements of 37 CFR 1.71.

The method of diverting the sheet from the processing apparatus is shown in Figures 11 and 12 and the related disclosure in the specification. As stated on page 11, line 4 "[t]he impingement of the transfer blade on the sheet can break, or assist in breaking, the sheet, creating a new initial edge 56 to the formed sheet 51." Thus, when the formed sheet 51 is running to the intake area 52, the transfer blade can break the sheet, creating a new initial edge 56. The new edge thus is not under tension between one processing apparatus and the source/forming apparatus, and is free to travel in a direction away from the processing apparatus. The new edge 56 can be directed to the nip rolls 53 and 54 by a variety of methods, including gravity. Direction of the sheet can also be influenced by the deflector 58. For example, page 12, line 9 states that "[o]nce the sheet has been broken, the orientation and position of the deflector directs the sheet away from the intake area 52. The formed sheet thus passes between the nip rolls 53 and 54."

The main direction or line of travel of the sheet of material has been addressed previously by Applicants in the response filed on December 1, 2004. As stated in that response, the specification, with reference to Figure 11, describes an intake area 52 of a processing apparatus. The original direction of travel of the sheet of material prior to being diverted is thus the direction between the source of the sheet 51 and the intake

area 52. This is consistent with the plain meaning of the language "... diverted away from the intake area ..." in the specification (p. 10, lines 25-26). If the sheet is diverted from a particular destination, then that destination marks the end of the original direction of travel. Figure 12 only emphasizes this original direction of travel, as it shows new initial edge 56 being directed toward the intake area 52.

The questions relating to the purpose of breaking or cutting in sections the sheet by nip rolls and relating to the purpose of having two cutting devices doing the same cutting operation appear sufficiently similar so as to be addressed in a single explanation. Referring to Figures 11-15 and the related disclosure, the nip rolls contact the sheet only when the sheet is being diverted away from the processing apparatus (page 10, lines 25-26). The nip rolls can break, or can contribute to the breaking, of the sheet prior to its being threaded to the processing apparatus. It may be useful to cut a sheet into smaller sections when diverted away from the processing apparatus, for example in order to allow easier recycling or disposal (page 8, lines 12-15; page 10, lines 13-14; page 12, lines 3-4). As provided on page 11, line 12 "[t]he breaking of the sheet, so as to form a new initial edge to be threaded, may be accomplished by the action of the nip rolls, by the action of the transfer blade, or by the nip rolls and transfer blade together." This cooperation between the nip rolls and the transfer blade is discussed in detail in the paragraphs on page 11 from lines 1-23, and at page 11, line 30 through page 12, line 2. Thus, the nip rolls and the transfer blade are not conflicting cutting devices, but rather can be used individually or together depending on the requirements of the sheet and the apparatus.

Applicants respectfully submit that Figures 11-15 and the disclosure at least from page 10, line 23 through page 12, line 12 provide a clear disclosure of the functions and purposes of the various components of the apparatus. It is noted that the provision of optional configurations of an apparatus or a method should not be taken as a lack of clarity in the specification. Accordingly, the present specification fully meets the requirements of 37 CFR 1.71. Applicants request that these objections be withdrawn.

Rejections under 35 U.S.C. § 112, 1st Paragraph

Claims 17 and 24 were rejected under 35 U.S.C. § 112, 1st paragraph, as not enabled. The Office Action asserts that the specification fails to teach the purpose of breaking or cutting in sections the sheet by nip rolls, since a transfer blade is already cutting the sheet.

The rejection of the claims as not enabled is respectfully traversed. As noted above, the nip rolls and the transfer blade are not conflicting cutting devices, but rather can be used individually or together depending on the requirements of the sheet and the apparatus. With respect to the recitation in claim 24 regarding cutting the sheet into sections, it may be useful to cut a sheet into sections when it is diverted away from the processing apparatus. For example, smaller sections may be easier to recycle or to dispose of (page 8, lines 12-15; page 10, lines 13-14; page 12, lines 3-4).

Applicants respectfully submit that the specification meets the requirements of 35 U.S.C. § 112, 1st paragraph. Accordingly, claims 17 and 24 are fully enabled by the specification, and Applicants request that this rejection be withdrawn.

Rejections under 35 U.S.C. § 102

Claim 23 was rejected under 35 U.S.C. § 102(b) as being anticipated by Sankaran et al. (U.S. Pat. No. 6,082,659).¹ The Office Action asserts that Sankaran discloses the various "means" as recited in the claims, including means for directing a sheet toward a processing apparatus and means for directing a sheet away from a processing apparatus. The Office Action correlates the mandrel 2, the belt wrapper 22, and the belt wrapper tucking role 34 of Sankaran with the processing apparatus. The Office Action further correlates the rollers 12 and 16 of Sankaran with a means for directing the sheet away from the processing apparatus.

¹ Although this reference is cited as U.S. Pat. No. 5,383,622, this patent issued to Kohler, not Sankaran et al. However, the discussion of the reference in the Office Action is consistent with U.S. Pat. No. 6,082,659 to Sankaran et al., which is listed along with the Kohler patent on the PTO-892 form attached to the Office Action. Accordingly, U.S. Pat. No. 6,082,659 is the reference that is addressed by Applicants throughout this response.

The rejection of Claim 23 is respectfully traversed, as Sankaran fails to disclose each and every element of the claims. Specifically, Sankaran fails to disclose a means for directing the sheet away from the processing apparatus. Applicants respectfully disagree with the Office Action's correlation of drawing elements 12 and 16 with a means for directing the sheet away from the processing apparatus. Figure 1 of Sankaran illustrates rolls 12 and 16 directing the strip 30 to mandrel 4 (col. 4, lines 54-59). Since mandrel 4 is equivalent to mandrel 2, which the Office Action has identified as part of the processing apparatus, this Figure clearly shows that rolls 12 and 16 are components of the processing apparatus (col. 4, lines 31-35). Likewise, Figures 2 and 3 illustrate roll 16 as directing the strip to mandrel 2 (col. 5, line 62 – col. 6, line 20). Thus, rolls 12 and 16 are part of the processing apparatus of Sankaran and cannot be separate devices that direct the sheet away from the processing apparatus. Sankaran does not disclose or suggest any component that functions to direct the strip 30 away from the processing apparatus, where the processing apparatus is correlated with drawing elements 2, 22, and 34. Rather, Sankaran teaches directing the strip 30 from one portion of the processing apparatus (filled mandrel 4) to another portion of the processing apparatus (empty mandrel 2). Consequently, Sankaran cannot anticipate claim 23, as the reference does not disclose each and every element of the claim. Applicants respectfully request that this rejection be withdrawn.

Rejections under 35 U.S.C. § 103

Sankaran in view of Campbell—

Claims 14-16, 20, and 22 were rejected under 35 U.S.C. § 103(a) as obvious over Sankaran in view of Campbell, Jr. (U.S. Pat. No. 5,024,128). The Office Action asserts that Sankaran discloses a transfer blade having a retracted position and an extended position and a roll, and that a sheet of material passing between the retracted position and the extended position is diverted away from a processing apparatus by roll 12. The Office Action asserts that Campbell teaches a pair of nip rolls for creating tension on a sheet before the sheet is cut and delivered to a delivery system. The

Office Action asserts that it would have been obvious to replace the roll of Sankaran with the nip rolls of Campbell, and that this combination would provide the apparatus as claimed.

The rejection of Claims 14-16; 20 and 22 is respectfully traversed. The applied references, alone or in combination, fail to provide each and every element of the claims. Specifically, the combination of Sankaran and Campbell does not provide for the diversion of a sheet of material away from a processing apparatus as recited in independent claim 14. As noted above, Figure 1 of Sankaran illustrates roll 12 directing the strip 30 to mandrel 4, which is the filled equivalent of mandrel 2. Thus, roll 12 is an integral part of the processing apparatus of Sankaran and cannot divert the strip away from the processing apparatus. The Campbell reference has been cited only for its disclosure of nip rolls. Campbell does not disclose, teach or suggest the diversion of a sheet away from a processing apparatus, nor has the Office Action asserted that Campbell discloses, teaches or suggests such a diversion. Replacing roll 12 of Sankaran with the nip rollers 80 and 81 of Campbell would still result in the sheet being directed within the processing apparatus, rather than being diverted away from the processing apparatus. If the replacement of roll 12 by the nip rollers 80 and 81 is intended to direct the sheet away from mandrel 4 to the delivery system of Campbell, then the apparatus of Sankaran is destroyed, since the purpose of Sankaran is to coil the strip on a mandrel. Thus, not only does the combination of Sankaran and Campbell fail to provide each and every element of the claims, there is no genuine suggestion or motivation to combine the disclosures of the references, as it is unclear how the addition of the nip rolls of Campbell could possibly benefit the apparatus of Sankaran.

The combination of Sankaran and Campbell does not disclose, teach or suggest each and every element of claims 14-16, 20 and 22. In addition, there is no genuine suggestion or motivation to combine the disclosures of the references. Accordingly, a *prima facie* case of obviousness has not yet been presented, and Applicants respectfully request that this rejection be withdrawn.

Sankaran in view of Campbell and Lotto—

Claims 17, 18 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sankaran in view of Campbell, and in further view of Lotto et al. (U.S. Pat. No. 5,588,644). See Office Action, sections 8 (pp. 5-6) and 10 (p. 7). The Office Action asserts that Lotto discloses a sheet of material that moves at a first speed and that is broken by the stress or tension created by a pair of nip rolls rotating at a second speed greater than the first speed. The Office Action further asserts that it would be obvious to modify the combined apparatus of Sankaran and Campbell with the difference in speeds disclosed in Lotto, and that this modification would provide the apparatus as claimed.

The rejections of Claims 17, 18 and 24 are respectfully traversed. The applied references, alone or in combination, fail to provide each and every element of the claims. Dependent Claims 17 and 18 each contain all of the elements of independent Claim 14, including the diversion of a sheet of material away from a processing apparatus. As noted above with respect to claims 14-16, 20 and 22, Sankaran and Campbell, alone or in combination, do not disclose, teach or suggest the diversion of a sheet of material away from a processing apparatus. Lotto does not disclose, teach or suggest, nor has the Office Action asserted that Lotto discloses, teaches or suggests, the diversion of a sheet of material away from a processing apparatus. Accordingly, Sankaran, Campbell and Lotto, alone or in combination, do not provide each and every element of claims 17 and 18.

Dependent Claim 24 contains all of the elements of independent Claim 23, including a means for directing the sheet away from the processing apparatus. As noted above with respect to claim 23, Sankaran does not disclose, teach or suggest a means for directing the sheet away from the processing apparatus. Neither Campbell nor Lotto disclose, teach or suggest, nor has the Office Action asserted that Campbell or Lotto disclose, teach or suggest, a means for directing the sheet away from the processing apparatus. Accordingly, Sankaran, Campbell and Lotto, alone or in combination, do not provide each and every element of claim 24.

The combination of Sankaran, Campbell, and Lotto does not disclose, teach or suggest each and every element of dependent Claims 17, 18 and 24. Accordingly, a *prima facie* case of obviousness has not yet been presented, and Applicants respectfully request that this rejection be withdrawn.

Sankaran in view of Campbell and Dambroth—

Claims 19 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sankaran in view of Campbell, and in further view of Dambroth et al. (U.S. Pat. No. 3,817,467). The Office Action asserts that Dambroth discloses a transfer blade having a plurality of individual air nozzles and discloses the use of this blade on a fibrous textile material. The Office Action further asserts that it would be obvious to modify the combined apparatus of Sankaran and Campbell with the transfer blade disclosed in Dambroth, and that this modification would provide the apparatus as claimed.

The rejection of Claims 19 and 21 is respectfully traversed. The applied references, alone or in combination, fail to provide each and every element of the claims. Dependent Claims 19 and 21 each contain all of the elements of dependent independent Claim 14, including the diversion of a sheet of material away from a processing apparatus. As noted above with respect to claims 14-16, 20 and 22, Sankaran and Campbell, alone or in combination, do not disclose, teach or suggest the diversion of a sheet of material away from a processing apparatus. Dambroth does not disclose, teach or suggest, nor has the Office Action asserted that Dambroth discloses, teaches or suggests, the diversion of a sheet of material away from a processing apparatus. Accordingly, Sankaran, Campbell and Dambroth, alone or in combination, do not provide each and every element of claims 19 and 21.

The combination of Sankaran, Campbell, and Dambroth does not disclose, teach or suggest each and every element of dependent Claims 19 and 21. Accordingly, a *prima facie* case of obviousness has not yet been presented, and Applicants respectfully request that this rejection be withdrawn.

Sankaran in view of Dambroth—

Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sankaran in view of Dambroth. The Office Action asserts that Dambroth discloses the use of a transfer blade on a fibrous textile material. The Office Action further asserts that it would be obvious to modify the apparatus of Sankaran with the fibrous web of Dambroth, and that this modification would provide the apparatus as claimed.

The rejection of Claim 25 is respectfully traversed. The applied references, alone or in combination, fail to provide each and every element of the claim. Dependent Claim 25 contains all of the elements of independent Claim 23, including a means for directing the sheet away from the processing apparatus. As noted above with respect to claim 23, Sankaran does not disclose, teach or suggest a means for directing the sheet away from the processing apparatus. Dambroth does not disclose, teach or suggest, nor has the Office Action asserted that Dambroth discloses, teaches or suggests, a means for directing the sheet away from the processing apparatus. Accordingly, Sankaran and Dambroth, alone or in combination, do not provide each and every element of claim 25.


The combination of Sankaran and Dambroth does not disclose, teach or suggest each and every element of dependent Claim 25. Accordingly, a *prima facie* case of obviousness has not yet been presented, and Applicants respectfully request that this rejection be withdrawn.

CONCLUSION

In conclusion, all of the grounds raised in the outstanding Office Action for rejecting the application are believed to be overcome or rendered moot based on the remarks above. Thus, it is respectfully submitted that all of the presently presented claims are in form for allowance, and such action is requested in due course. Should the Examiner feel a discussion would expedite the prosecution of this application, the Examiner is kindly invited to contact the undersigned.

Respectfully submitted,

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